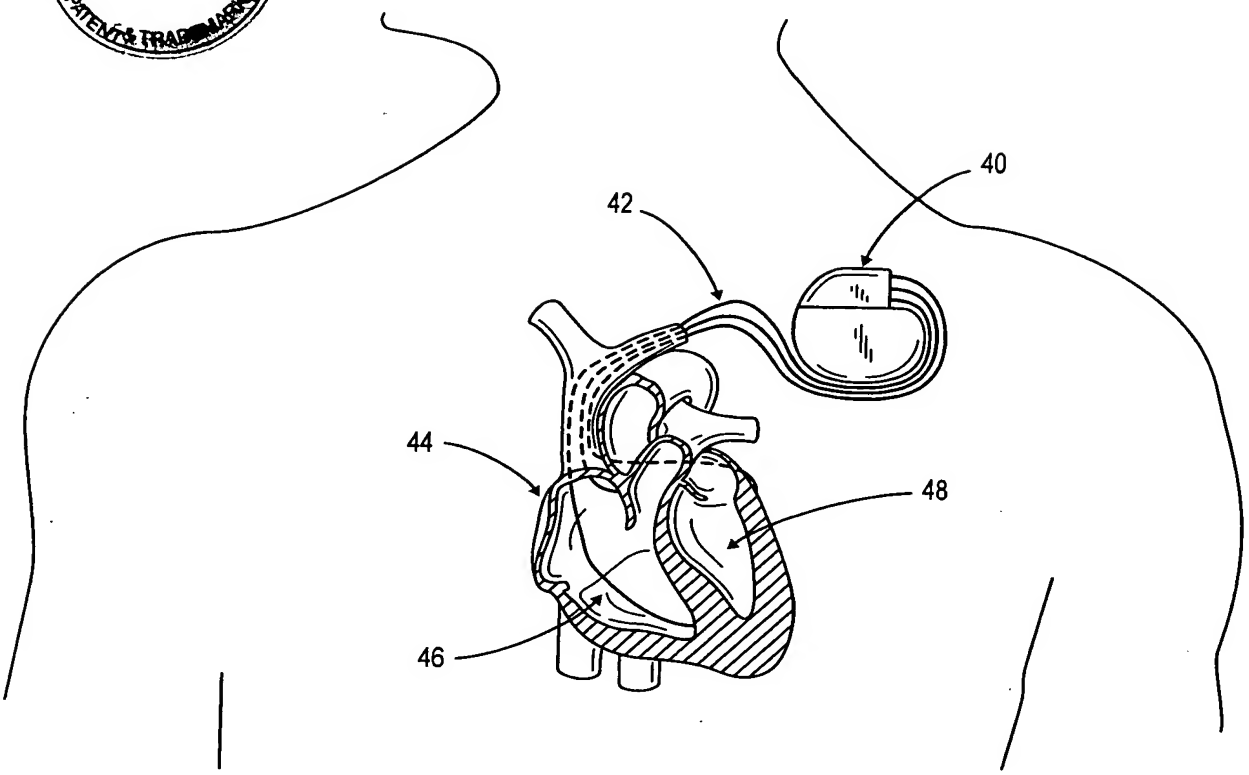

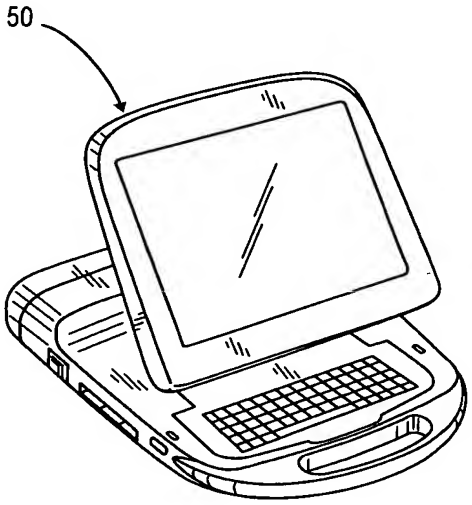

FIG. 2

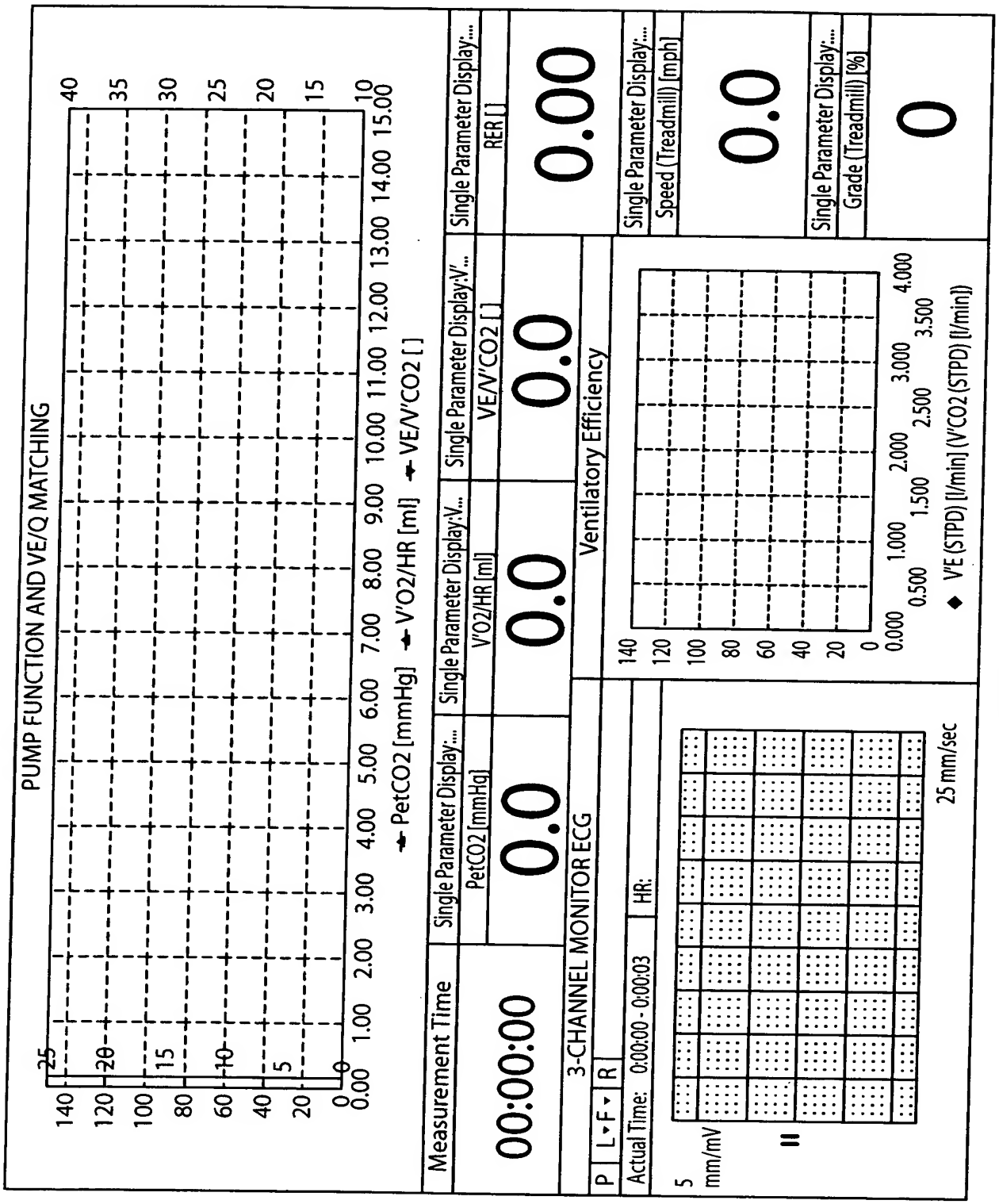
PUMP FUNCTION AND VE/Q MATCHING
PetCO2 [mmHg]
V'O2/HR [ml]
VE/V'CO2 [ ]
Measurement Time
Single Parameter Display:...
PetCO2 [mmHg]
Single Parameter Display:V...
V'O2/HR [ml]
Single Parameter Display:V'...
VE/V'CO2 [ ]
Single Parameter Display:...
RER [ ]
00:00:00
0.0
0.0
0.0
0.00
3-CHANNEL MONITOR ECG
Ventilatory Efficiency
P
L
F
R
Actual Time: 0:00:00 - 0:00:03
HR:
5 mm/mV
II
25 mm/sec
V'E (STPD) [l/min] (V'CO2 (STPD) [l/min])
Single Parameter Display:...
Speed (Treadmill) [mph]
0.0
Single Parameter Display:...
Grade (Treadmill) [%]
0

FIG. 3

	A V (ms)	V V (ms)
Minimum	(60) 100	(66) 10
Average	(62) 140	(68) 20
Maximum	(64) 180	(70) 30

FIG. 4

Delay Optimization Protocol

Elapsed Time	System Operator Tasks	Data Processing Tasks
0	Connect Patient to CPX	
1	Start Treadmill Prestart Measurement Set AV min Start Measurement	Display Variables
3	Observe Variables Set AV ave	Display Variables Store Variables to AV min
5	Observe Variables Set AV max	Display Variables Store Variables to AV ave
7	Observe Variables	Display Variables Store Variables to AV max
8	Select and Set AV opt Rest Patient (Opt.) Set VV min	Calculate Decision Matrix Print Decision Matrix Print Report Summary
10	Observe Variables Set VV ave	Display Variables Store Variables to VV min
12	Observe Variables Set VV max	Display Variables Store Variables to VV ave
14	Observe Variables	Display Variables Store Variables to VV max
15	Stop Treadmill Stop Measurement Select and Set VV opt	Calculate Decision Matrix Print Decision Matrix Print Report Summary

92

90

96

FIG. 5

Elapsed Time			O2 Pulse	EQ CO2	ETCO2	Vent. Eff. Slope
Start						
1 min	Breath 1	AV min	0	0	0	0
	Breath 2		0	0	0	0
			0	0	0	0
	Breath n		0	0	0	0
3 min	Breath 1	AV ave	0	0	0	0
	Breath 2		0	0	0	0
			0	0	0	0
	Breath n		0	0	0	0
5 min	Breath 1	AV max	0	0	0	0
	Breath 2		0	0	0	0
			0	0	0	0
	Breath n		0	0	0	0
7 min						
8 min	Breath 1	VV min	0	0	0	0
	Breath 2		0	0	0	0
			0	0	0	0
	Breath n		0	0	0	0
10 min	Breath 1	VV ave	0	0	0	0
	Breath 2		0	0	0	0
			0	0	0	0
12 min	Breath n	VV max	0	0	0	0
	Breath 1		0	0	0	0
	Breath 2		0	0	0	0
			0	0	0	0
	Breath n		0	0	0	0
15 min						

82

84

FIG. 6

	EQCO2		ETCO2		O2 Pulse		V.E. Slope	
	Average Value	Deviation (%)	Average Value	Deviation (%)	Average Value	Deviation (%)	Average Value	Deviation (%)
AV min	0	0	0	0	0	0	0	0
AV ave	0	0	0	0	0	0	0	0
AV max	0	0	0	0	0	0	0	0
VV min	0	0	0	0	0	0	0	0
VV ave	0	0	0	0	0	0	0	0
VV max	0	0	0	0	0	0	0	0
	102	104	102	104	102	104	102	104

(REPLACEMENT SHEET)

FIG. 7

	EQCO2			ET CO2			O2 Pulse			V.E. Slope			Average of Totals		
	Rank	D %	S %	Rank	D %	S %	Rank	D %	S %	Rank	D %	S %	Rank	D %	S %
AV min	75	12	5	75	14	8	100	4	6	50	9	6	75	9.75	6.25
AV ave	100	0	0	100	8	0	75	12	0	100	16	0	93.75	9	0
AV max	50	4	10	50	8	16	50	7	4	75	11	2	55.25	7.5	8
VV min	0	0	0	0	0	0	0	0	0	0	0	0			
VV ave	0	0	0	0	0	0	0	0	0	0	0	0			
VV max	0	0	0	0	0	0	0	0	0	0	0	0			

(REPLACEMENT SHEET)

FIG. 8

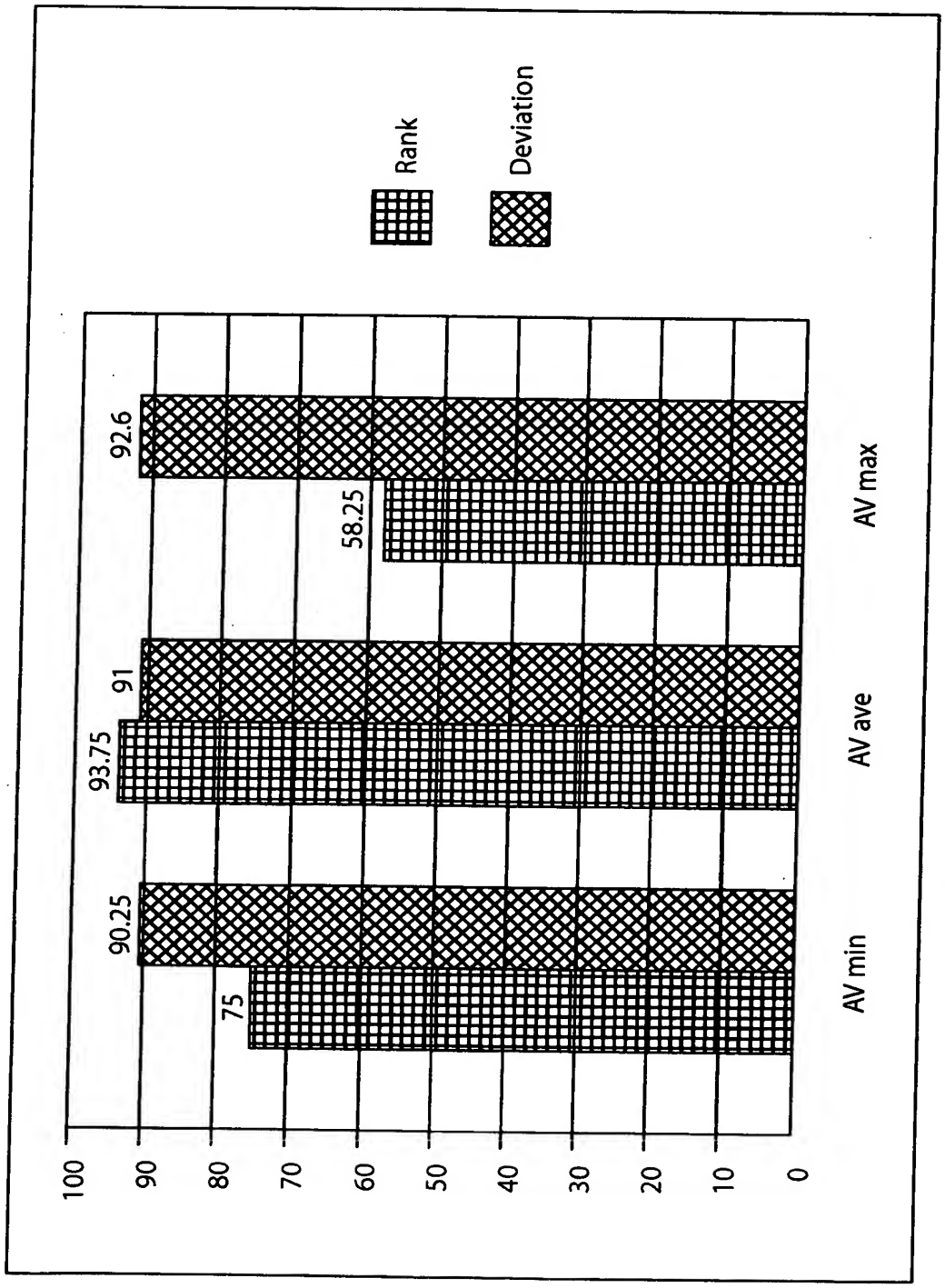
Rank
Deviation
92.6
58.25
93.75
91
90.25
75
100
90
80
70
60
50
40
30
20
10
0
AV max
AV ave
AV min
S = 8.0 %
S = 6.25 %

FIG. 9